5

10

ABSTRACT OF THE DISCLOSURE

The present invention relates to a mobile communication system, and more particularly, to a method for a handoff of a medium rate data call in a mobile communication system. In the present invention, if the pilot strength of the BTS in the active set to which a SCH is not allocated is smaller than the pilot strength of the BTS to which the SCH is not allocated for a predetermined period of time, the mobile station transmits the corresponding information to the base station by means of a PSMM, and the base station performs a handoff of the SCH resource according to the PSMM. In addition, if the base station receives the PSMM from the mobile station, whether or not the SCH is allocated is determined using the pilot strength of the corresponding BTS, reference threshold, and T_ADD. Therefore, frequent handoffs are prevented and the load of the mobile station is reduced because there is no need to compute a SCH reference threshold at every handoff request. Moreover, it is made possible to maintain a constant data rate and provide a medium rate data service by performing a handoff of an available SCH.